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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

WEINSTEIN, LEONARD J

ART UNIT

PAPER NUMBER

3746

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/599,287	Applicant(s) ABATE ET AL.	
	Examiner LEONARD J. WEINSTEIN	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2008 and 04 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☒ Claim(s) 1-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/25/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 2 is objected to because of the following informalities: the limitation of “right-angular” should be amended to recite --- right angles ---. Appropriate correction is required.
2. Claim 8 is objected to because of the following informalities: the limitation of “horizontall” should be amended to recite --- horizontally ---. Appropriate correction is required.
3. Claim 9 is objected to because of the following informalities: the limitation of “latter” should be amended to recite --- cover --- so that it is clear that the limitation refers to the cover and not the wall of the compartment. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. **Claims 1-10** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. **Claim 1** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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a. The limitations of **claim 1** are generally unclear and ambiguous due to the inconsistent manner in which elements such as top and bottom shells, edges, a filter, and a fuse are recite after initial introduction of these elements in the claim. The rejections that follow specifically point out the statutory deficiencies of the claim. Further claim 1 has been considered with more clear and consistent terminology; the interpretation of the claim is presented after the rejections that follow.

b. **Claim 1** rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: which "shell" is superimposed on to another shell. The limitation of "shells which are superimposed" is unclear because it does not set forth how one shell is superimposed onto the other shell.

c. **Claim 1** recites the limitation "shells which are superimposed," "the shells forming said body," in lines 4 and 9 respectively. There is insufficient antecedent basis for each recitation of "shells" in the cited limitations of the claim. As best understood by the examiner the limitations of "shells" will be considered to be --- top and bottom shells ---.

d. **Claim 1** recites the limitation "their edges" in line 5. There is insufficient antecedent basis for this limitation in the claim.

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- e. **Claim 1** recites the limitation "self-center one with other" in line 5. There is insufficient antecedent basis for this limitation in the claim.
- f. **Claim 1** recites the limitation "the motor" in lines 6-7. There is insufficient antecedent basis for this limitation in the claim. As best understood by the examiner the limitations will be considered to be --- electric motor ---.
- g. **Claim 1** rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: which element "overlaps" another element. First it is unclear whether an entire shell overlaps another shell or some portion of an edge of another shell. Second it is unclear which shell, top or bottom, overlaps the other shell.
- h. As best understood by the examiner the limitations of **claim 1** will be considered to be:
- ---- Operating unit to generate a flow of air under pressure in aerosol therapy appliances, comprising a pump group which includes a head, an electric motor and a fan, and a body enclosing said group and formed by ~~two~~ a bottom and a top shells, one of the top and bottom shells which are is superimposed on to the other of the top and bottom shell and to close the body on a transversal plane, the transversal plane is on a level with a bottom shell edge and a top shell edge their

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edges formed to self-center one of the top and bottom shell with the other of the top and bottom shell, and where the head of the pump group has an air inlet duct complete with a filter and an air outlet duct, and the electric motor is equipped with a plurality of suspension elements in said body and is electrically connected to a socket and a switch supported by a plate with a fuse, ~~characterized by the fact that~~ wherein the top and bottom shells that forming said body have means for receiving and holding the air inlet duct with the filter, the air outlet duct, and the plate with the fuse, socket, and electric switch following their the overlapping of one of the top shell edge and the bottom shell edge with the other of the top shell edge and bottom shell edge for an upon an automated assembly of the group. ---

7. **Claim 3** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The limitations of **claim 3** are generally unclear and ambiguous due to the inconsistent manner in which elements such as top and bottom shells, edges, a filter, and a fuse are recite after initial introduction of these elements in the claim.

Further:

i. The use of serial commas such as in “the two shells of the body have, one a level with their matching edges, two recesses forming

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together, when body is closed, a lateral lodging" and "in which one of two shells, the top one" is generally unclear.

ii. The claim does not refer back to the limitations of claim 1 which invoke 35 U.S.C. § 112 sixth paragraph.

iii. The recitation of "a recess" in line 6 of the claim does not include a prefix so as to distinguish from the other recess element introduced in the claim.

The rejections that follow specifically point out the statutory deficiencies of the claim. Further claim 1 has been considered with more clear and consistent terminology; the interpretation of the claim is presented after the rejections that follow.

b. **Claim 3** is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are:

i. The relationship between "matching edges" and the "two slots" because the way the claim is worded the matching edges could only apply to the recesses recited immediately after the recitation of "edges."

ii. The relationship between the joined recesses and slots and the means for receiving and holding the plate, air inlet and outlet ducts, and

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other elements introduced in claim 1. Claim 3 does not refer back to the "means for receiving and holding" of claim 1.

c. **Claim 3** recites the limitation "two shells" in line 2 and 6 of the claim.

There is insufficient antecedent basis for each recitation of "shells" in the cited limitations of the claim. As best understood by the examiner the limitations of "shells" will be considered to be --- top and bottom shells ---.

d. **Claim 3** recites the limitation "the motor" in line 5. There is insufficient antecedent basis for this limitation in the claim. As best understood by the examiner the limitations will be considered to be --- electric motor ---.

e. As best understood by the examiner the limitations of **claim 3** will be considered to be:

- ---- Operating unit according to claim 1, ~~in which the two~~ wherein each of the top and bottom shells of the body have a first recess and a slot each, on a level with their matching the bottom and top shell edges, wherein when the body is closed the top shell edge is matched to the bottom shell edge and the means for receiving and holding the air inlet duct with the filter is provided by the first two recesses joined forming together, when body is closed, to form a lateral lodging to receive the air inlet duct and the air filter, and two the means for receiving and holding the socket, the switch, and the plate is provided by the slots that are joined together to form, with body closed, a lateral opening that to receives and holds the socket, the switch, and the plate for

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connecting the electric motor to the electric supply source, and wherein
~~in which one of the two shells, the top one, a top of the top shell is~~
provided with ~~has at the top a~~ second recess having a bottom with a
hole ~~at the bottom made to~~ that receives the air outlet duct for
providing a means for holding and receiving the air outlet duct. ---

8. **Claim 4** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. **Claim 4** recites the limitation "the respective side seating" in line 2 of the claim. There is insufficient antecedent basis for each recitation of "shells" in the cited limitations of the claim. As best understood by the examiner the limitations of "shells" will be considered to be --- a lateral lodging formed by a first recess in a top shell and a first recess of the bottom shell ---. The examiner notes that this interpretation is based in part on the interpretation of claim 3 introducing the lateral lodging however the actual language considered accounts for claim 4 depending from claim 1 and not claim 3.

b. **Claim 4** recites the limitation "the respective hole" in line 3 of the claim. There is insufficient antecedent basis for each recitation of "shells" in the cited limitations of the claim.

c. **Claim 4** is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural

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connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: what the first recited seal is interposed between. Since the element of "the respective side seating" is not linked by the claim to any other component previously recited one of ordinary skill in the art would not be able to ascertain whether the seal was located between a duct and one of the shells or between a duct and the filter.

d. As best understood by the examiner the limitations of **claim 4** will be considered to be:

- Operating unit according to claim 1, in which the air inlet duct with the filter is lodged in ~~the respective side seating~~ a lateral lodging formed by a first recess in a top shell and a first recess of bottom shell with interposition of a first seal between the air inlet duct and the first recesses of the top and bottom shells, and a second seal is interposed between a hole defined by a second recess in a top portion of the top shell and the air outlet duct, wherein the air outlet duct is lodged in the respective hole of the second recess in the top portion of the top shell of the body with interposition of a further seal.

9. **Claim 5** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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a. **Claim 5** recites the limitation "the bottom" in line 2 of the claim. There is insufficient antecedent basis for each recitation of "shells" in the cited limitations of the claim.

b. **Claim 5** recites the limitation "said legs" in line 3 of the claim. There is insufficient antecedent basis for each recitation of "shells" in the cited limitations of the claim.

c. **Claim 5** is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: which of the damper and the protrusion is provided in line and facing the air outlet duct. This is a product of the cumbersome language/serial comma usage in the claim. As best understood by the examiner the limitations of **claim 5** will be considered to be:

- Operating unit according to claim 1, in which a bottom of the bottom shell of said body is equipped with a plurality of feet ~~at the bottom, and in which, wherein~~ inside said shell, a protrusion is disposed on an axis with one of said feet legs, ~~is shaped a protrusion and acting acts~~ as a support for the head of the pump group, wherein said protrusion ~~extending extends~~ to rest against ~~the~~ a bottom part of said head in line with and facing the air outlet duct, with interposition of wherein a

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damper element is interposed between the protrusion and the bottom part of the head ~~and so as to be in line and facing the air outlet duct.~~

10. **Claim 7** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. **Claim 7** recites the limitation "said body or shell" in lines 2 and 3 respectively. There is insufficient antecedent basis for each recitation of "shell" in the cited limitations of the claim. As best understood by the examiner the limitation of "shell" will be considered to be -- one of said top and bottom shell --.

b. **Claim 7** recites the limitation "the seating" in line 4 of the claim. There is insufficient antecedent basis for each the limitation in the claim.

c. **Claim 7** is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the relationship between "the seating" and the means for receiving and holding the air inlet duct. Claim 7 does not refer back to the "means for receiving and holding" of claim 1.

d. As best understood by the examiner the limitations of **claim 7** will be considered to be:

- --- Operating unit according to claim 1, in which said filter can be removed from the outside of the body or top and bottom shells, the

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filter being accessible using a tool to remove it through a slot provided in said body or top and bottom shells and radially oriented to the ~~seating~~ means for holding and receiving an air inlet duct provided by a lateral lodging formed by the top and bottom shells ~~hosting the air duct.~~

11. **Claim 8** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. **Claim 8** recites the limitation "the matching edges" in line 8 of the claim.

There is insufficient antecedent basis for each the limitation in the claim.

b. **Claim 8** is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the relationship between "the matching edges" and the means for receiving and holding the air inlet duct. Claim 8 does not refer back to the "means for receiving and holding" of claim 1.

c. As best understood by the examiner the limitations of **claim 8** will be considered to be:

- --- Operating unit according to claim 1, in which the air inlet duct and the air outlet duct of the pump group are parallel, both horizontally placed and held between the ~~matching~~ top and bottom shell edges

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which are matched and provide the means for receiving and holding
the air inlet duct and air outlet duct of the two shells forming said body.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. **Claims 1 and 6-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Attolini '360 US 6,318,360 ("Attolini '360") in view of Lynch et al. US D464,724, further in view of Adahan US 5,116,206 ("Adahan"), still further in view of Hsiao US 7,140,845 ("Hsiao").

a. With respect to **claim 1**:

- i. **Attolini '360 teaches** all the limitations for a operating unit to generate a flow of air under pressure in aerosol therapy appliances (Attolini '360 – Abstract) including: a pump group 5 which includes a head

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(section of element 5 between motor element 3 and element 6 of compressor group 5 as shown in Attolini '360 fig. 1; "5-head"), an electric motor 3 and a fan 4, and a body 2 enclosing said group 5 and formed by a bottom 2a and a top 2b shell, one of the top 2b and bottom 2a shell is superimposed on to the other of the top 2b and bottom 2a shell (as shown in Attolini '360 figure 3) to close the body 2 on a transversal plane (plane defined where bottom edge of element 2b meets top edge of element 2a; bottom edge of element 2b – "2b-bottom edge," top edge of element 2a – "2a-top edge," plane on which edges meet – "2a/2b-plane"), the transversal plane (2a/2b-plane) is on a level with a bottom shell edge (2a-top edge) and a top shell edge (2b-bottom edge) formed to self-center one of the top 2b and bottom 2a shell with the other of the top 2b and bottom 2a shell, and where the head (5-head) of the pump group 5 has an air inlet duct 7 complete with a filter 11 and an air outlet duct 8, and the motor 3 is equipped with a plurality of suspension elements ("rubber engagements" as disclosed in Attolini '360 at col. 3 ll.35-39) in said body 2 and is electrically connected to a power source (not shown) and a switch (switch next to elements 7a and 8a and disposed on element 2b as shown in Attolini '360 figure 3; "2b-switch"), wherein the top 2b and bottom 2a shells that form said body 2 have means for receiving and holding the air inlet duct 7 with the filter 11 (means defined by seat 13), the air outlet duct 8 (means defined by seat 13), and electric switch (2b-switch; means for

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holding and receiving defined by mount on the inside of element 2b not shown) following the overlapping (as shown in figure 2 the sides of the element 2a have a raised inner edge or lip that presumably receives an outer lip of element 2b; as shown in figure 3 the back portion of the edge of element 2a is cover by the back portion of element 2b also is appears as though the edge of the cover 2c fits outside the raised lip on the edge of the front portion of element 2a which defines compartment 2d) of one of the top shell edge (2b-bottom edge) and the bottom shell edge (2a-top edge) with the other of the top shell edge (2band bottom shell edge upon an automated assembly of the group 5 (Attolini '360 – col. 2 ll. 54-col. 3 ll. 6; col. 3 ll. 40-44).

ii. **Socket** – Attolini '360 is silent as to how power is supplied to an electric motor that drives a compressor group.

(1) **Lynch** - Lynch teaches a design for a flow generator of the type used for medical applications which is analogous to the single unit compressor of Attolini '360. Lynch teaches a design which includes a socket for supplying power to the flow generator (Lynch - fig. 17).

(2) **Standard for Combining** - Where a claimed improvement on a device or apparatus is no more than "the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement," the claim is

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unpatentable under 35 U.S.C. 103(a). *Ex Parte Smith*, 83 USPQ.2d 1509, 1518-19 (BPAI, 2007) (*citing KSR v. Teleflex*, 127 S.Ct. 1727, 1740, 82 USPQ2d 1385, 1396 (2007)). Absent evidence that the modifications necessary to effect the combination of elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. 103(a). *Ex Parte Smith*, 83 USPQ.2d at 1518-19 (BPAI, 2007) (*citing KSR*, 127 S.Ct. at 1740, 82 USPQ2d at 1396).

(3) **Combination** - Attolini '360 is silent as how power would be supplied to the single unit compressor but does teach that an objective of the instant reference is to minimize the number of external connections (Attolini '360 – col. 1 ll. 44-49). In addition to the pipe-less air inlet and outlet ducts, providing a socket instead of a power chord would eliminate another potential external connection extending from the apparatus 1 of Attolini '360. Further, it is well known in the art to provide an apparatus to be supplied with electrical power with either a power chord extending from the apparatus or a socket that receives a power chord through a socket adapter, as taught by Lynch.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a single unit compressor, as taught by Attolini '360, with a socket, as taught by

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Lynch, because the combination unites a component known to be used to supply power to compressors of the type taught by Attolini '360 and would yield the predictable result of a compressor equipped with an electrically powered motor. Therefore the Applicant claims a combination that only unites old elements with no change in the respective functions of those old elements, and the combination of those elements yields predictable results. Since the Applicant has submitted no persuasive evidence that the combination of the above elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. 103(a) because it is no more than the predictable use of prior art elements according to their established functions resulting in the mere application of a known technique to a piece of prior art ready for improvement.

iii. **Socket and Switch on Plate** – The combination of Attolini '360 and Lynch does not teach a socket and switch supported on a plate.

(1) **Adahan** – Adahan teaches the limitations for a pump including a body 2 and a plate with a fuse 70 (fuse understood to be a part of a common circuit board of the type taught by Adahan) supporting a socket 72 and switch 74.

(2) **Combination** - Adahan teaches that providing a socket and switch on a printed circuit board is advantageous because it

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provides an arrangement that is small and compact and can be easily inserted into a pump housing for supplying power to a pump (Adahan - col. 6 ll. 8-14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a single unit compressor, as taught by Attolini '360, modified to have a power supply provided through a socket, as taught by Lynch, further modified to have a plate one which both a socket and switch were mounted, as taught by Adahan, in order to provide a user interface which with which a user could plug in a pump to supply it with power and also turn the pump on (Adahan – col. 6 ll. 9-14).

iv. **Means for receiving a Plate** – Attolini '360 fails to teach the limitations for a means of holding and receiving a plate with the joining of first and second shells of a housing.

(1) **Hsiao teaches** the limitations wherein a slot (not designated) holds a circuit board 22 within a circuit board chamber 16 (Hsiao – fig. 2 and 3) which provides a means for receiving and holding a plate following the joining of one shell 11 edge (edge of element 11 that abuts element 12) with a second shell 12 edge (edge of element 12 that abuts element 11). Half of the slot is formed by a right cover 11 and the other half is formed by a left cover 12. The circuit board 22 is slid into the portion of the slot in

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left 11 or right 12 cover and then the other of the left 11 and right 12 cover is fastened to the cover where the circuit board was first placed.

(2) **Standard Combining** – see section 14.a.ii.(2).

(3) **Combination** - Referring to Attolini '360, the construction taught by Hsiao for a circuit board is similar to how the seat 13, formed by the space between the double walled partition presumably on both covers 2a and 2b and the recess formed within those walls, receives the terminal 6. As disclosed by Attolini '360 during assembly the top cover 2b is turned over and the motor 3, fan 4, compressor group 5, and terminal 6 are located inside of the top cover 2b with one half of the seat 13 receiving the terminal 6 (Attolini '360 – col. 3 ll. 28-32). Before the assembly 1 is turned over, the bottom cover 2a is placed over the top cover 2b with a portion of one cover overlapping the other cover to form the casing 2. In this step the other half of the seat 13 of Attolini '360 receives the bottom of a terminal 6 in a similar manner as taught by Hsiao when the second half of the slot formed by one of the covers (11, 12) receives the circuit board 22 before the covers (11, 12) are fastened together. The general technique of bringing together two housing components to form holding and receiving spaces with recesses or slots defined at the edges of the housing components

is used by both Attolini '360 and Hsiao for different components of the respective inventions.

Hsiao does not teach a component that extends from a circuit board 22 which also has a portion that is exposed to the exterior of the housing for a pump. Adahan teaches that at least a switch 74 which is analogous to the switch 24 of Hsiao, can be affixed to a circuit board 70 analogous to the circuit board 22 of Hsiao, and extend from the circuit board through a housing to be exposed external to a pump housing 2 (see Adahan fig. 2). This arrangement, where a primary portion of a component is internally housed but has a portion (with sockets) that is externally exposed, is generally analogous to the configuration of the seat 13, terminal 6, and housing 2 of Attolini '360. The body of the terminal 6 of Attolini '360 is housed inside a space defined by main compartment where the motor 3, fan 4, and compressor group 5 are located and a face plate including sockets 7a and 8a is external to said main compartment and able to connect to devices that are not part of the final assembly 1 of Attolini '360.

Hsiao teaches a pump where slots formed at the edges of adjoining housing components can be used to hold and receive circuit boards that are connected to switches. Attolini '360 teaches a pump where slots formed at the edges of adjoining housing

components can be used for a primarily internal component that has a face or an exposed surface where connections external to the main pump housing can be disposed. Adahan teaches a pump with a circuit board assembly that includes a switch and a socket extending from the circuit board that can be arranged so that a primary section of the assembly is internally housed and a surface where the connections are disposed can be external to the main pump housing.

Essentially the progression made of obvious by the references cited is that circuit boards for a pump can be held by slots formed by adjoining housing parts. Slots formed by adjoining housing parts can be used by components of a pump primarily housed inside the pump housing and formed to allow the components to have a connection surface external to the housing. Components of a pump primarily housed inside the pump housing but having a connection surface external to the housing can include circuit board assemblies comprising the same type of circuit boards which the prior art teaches can be held by slots formed by adjoining housing parts. Therefore the conclusion made obvious by the prior art is that slots formed by adjoining housing parts, as taught by Hsiao, formed to allow a component to have an external surface, as taught by Attolini '360, would be used to hold circuit board

assemblies requiring a surface to be external from a main pump housing, as taught by Adahan. The combination would amount to applying a technique, previously used to arrange existing components of a pump, to new components added to the pump that are capable of being arranged in a manner similar to the exiting components.

Therefore the Applicant claims a combination that only unites old elements with no change in the respective functions of those old elements, and the combination of those elements yields predictable results. Since the Applicant has submitted no persuasive evidence that the combination of the above elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. 103(a) because it is no more than the predictable use of prior art elements according to their established functions resulting in the mere application of a of a known technique to a piece of prior art ready for improvement.

b. With respect to **claims 6, 7, 8, and 9**, Attolini '360 teaches the limitations for an operating unit including:

[claim 6]

A filter 11 is tightly fitted in the air inlet duct 7 and has a longitudinal cavity partially obstructed by a pin 7a.

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[claim 7]

Said filter 11 can be removed from the outside of the body 2 or top 2b and bottom 2a shells (Attolini '360 – col. 2 ll. 45-48), the filter 11 being accessible using a tool (Attolini '360 - col. 3 ll. 2-6) to remove it through a slot (defined by element 13 disclosed as “a seat” in Attolini '360 at col. 3 ll. 29-32, further as shown in figure 2 the front end of element 6 is formed with a rim that is received between the walls of a double walled partition which forms a slot/seat; slot – “13” and double walled partition – “2-partition”) provided in said body 2 or top 2b and bottom 2a shells and radially oriented to the means for holding and receiving an air inlet duct 7 provided by a lateral lodging (the seat element 13 providing said lodging in addition to a slot for a filter 11 removal; see Attolini '360 – col. 3 ll. 28-31) formed by the top 2b and bottom 2a shells;

[claim 8]

Said air inlet duct 7 and the air outlet duct 8 of the pump group 5 are parallel, both horizontally placed and held between the top (2b – edge) and bottom (2a – edge) shell edges which are matched and provide the means for receiving and holding the air inlet duct 7 and air outlet duct 8 (as discussed above the seat 13 holds the front end of element 6 in which elements 7 and 8 are located and are formed by the bottom edge of element 2b and top edge of element 2a at along two walled partition separating element 2d from the compartment of element 1 housing elements 3, 4, 5, and 6);

[claim 9]

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Said body 2 forms a tool holder compartment 2d closed by a cover 2c, and the air inlet 7 and outlet 8 ducts of the pump group 5 are on a wall (2-partition) of said compartment 2d and are accessible through the cover 2c (Attolini '360 – fig. 3);

15. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Attolini '360 in view of Lynch, Adahan, and Hsiao, as applied to claim 1 above, further in view of Leonhard US 2003/0003003.

a. A combination of the references teaches the limitations as discussed but fails to teach the limitations for an operating unit that generates a flow of air under pressure (Leonard – ¶ [0003]) wherein an air inlet duct 18 and an air outlet duct 20 are disposed in planes at right angles to each other (Leonard – figs. 1, 2, and 10).

b. **Standard for Justifying Combination Under Doctrine of Equivalence -**
In order to rely on equivalence as a rationale supporting an obviousness-type rejection, the equivalency must be recognized in the prior art. *In re Ruff*, 256 F.2d 590, 118 USPQ 340 (CCPA 1958).

c. Leonhard teaches a fitting that includes a one piece pumphead with an inlet 18 and outlet 20 analogous to the terminal of Attolini '360. Leonhard shows that one piece pumphead units with inlet and outlet ports at right angles were an equivalent structure known in the art. Leonard represents evidence that pump fittings with inlet and outlet ports at right angles to each other were one piece input/output pump head units and art-recognized equivalent structures for

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terminal structures with parallel inlet and outlet ports. Therefore, because these two one piece input/output pump head units were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the pumphead of Leonhard for the terminal of Attolini '360. An express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. In re Fout, 675 F.2d 297, 213 USPQ 532 (CCPA 1982).

16. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Attolini '360 in view of Lynch, Adahan, and Hsiao, as applied to claim 1 above, further in view of Attolini US Des. 348,927 ("Attolini '927").

a. **Attolini '927** - A combination of the references teaches the limitations as discussed but fails to teach the limitations taught by Attolini '927 for an operating unit for generating airflow including air inlet and outlet ducts of a pump group arranged to be parallel, and emerge along a vertical axis on a level with the top shell of a body (Attolini '927 - fig. 2).

b. **Standard for Combination** - It has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

c. **Combination** - Attolini '360 shows an operating unit that is very similar to the inhalator of figures 1 and 2 of Attolini '927. One difference is that Attolini '927 teaches sockets that are connected to a terminal in a similar manner to the parallel sockets (7a, 8a)/ducts (7, 8) of the terminal 6 of Attolini '360. Attolini '927 provides evidence that it was known in the art to provide the terminal of the

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type taught by Attolini '360 with parallel ducts having sockets extending through a top shell of a housing along a vertical plane. A modification to Attolini '360 that provided an opening on the top shell of the housing as taught by the analogous inhalator of Attolini '927 would amount to a rearrangement of parts and would have been obvious. It has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Allowable Subject Matter

17. Claims 3-5 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim 1, also amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action, and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEONARD J. WEINSTEIN whose telephone number is (571)272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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